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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,856	03/25/2004	Michael Lester Kerns	DN2001-192D01	6677

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The Goodyear Tire & Rubber Company
Patent & Trademark Department - D/823
1144 East Market Street
Akron, OH 44316-0001

EXAMINER

PATEL, PRITESH ASHOK

ART UNIT	PAPER NUMBER
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3763

MAIL DATE	DELIVERY MODE
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01/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,856	Applicant(s) KERNS ET AL.	
	Examiner PRITESH PATEL	Art Unit 3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/25/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3 and 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Polyisoprene is commonly known in the art as rubber and the applicant's use of a neodymium catalyst to polymerize polyisoprene rubber is known. The term neodymium polyisoprene rubber is not shown to have any difference with polyisoprene and the examiner interprets the neodymium descriptor as a naming adjective derived from the catalyst in a reaction. Further neodymium being a rare metal would only be able to be in trace amounts in a polyisoprene structure designed to function with a substance entering a body or it would render the substance toxic as leeching would occur.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Case (US 4405317) in view of Takeuchi et al. (US 4433107).

Concerning claims 1 and 2, Case discloses a syringe (10) comprising a barrel (12) having a fluid chamber, a proximal end, a distal end, an elongated tip stemming from element (22), a plunger rod (16), and a ribbed stopper (50), comprised of rubber (Fig 1). Case does not disclose a neodymium polyisoprene rubber. Takeuchi et al. discloses a polyisoprene rubber synthesized using a neodymium element (column 4 lines 22-25). It would have been obvious to one of ordinary skill in the art at the time of the invention that a synthesized rubber made with neodymium would be a neodymium polyisoprene rubber. It would further have been obvious to one of ordinary skill in the art at the time of the invention to modify Case with a neodymium polyisoprene as taught by

Takeuchi et al. to use a purer form of rubber.

Concerning claims 16 and 17, in addition to the above disclosure, Case discloses a second barrel (16) with ribbed stopper (26), said second barrel slidably connectable with first barrel so as to mix to substance together before delivery (Fig 1).

7. Claims >? are rejected under 35 U.S.C. 103(a) as being unpatentable over Case in view of Takeuchi et al. in further view of Throckmorton et al. (US 3541063).

Concerning claims 3 and 18, Case in view of Takeuchi et al. fails to disclose a catalyst mechanism. Throckmorton et al. discloses a catalyst system including an organoaluminum compound, an organoneodymium compound, and at least one compound having a labile halide ion (column 2 line 30, column 3 lines 1-5, and column 3 line 39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Case in view of Takeuchi with a catalyst system as taught by Throckmorton et al.

Concerning claims 4 and 5, Throckmorton et al. discloses an organoaluminum compound and some examples of them (column 2 lines 30-58).

Concerning claims 6-10, Throckmorton et al. discloses an organoneodymium compound and a list of possible ligands 1 to 20 carbons long (column 2 line 60-72 and column 3 lines 1-33).

Concerning claims 11-14, Throckmorton discloses a labile halide ion (column 3 lines 38-50). It would have been obvious to one of ordinary skill in the art at the time of the invention that though only organometallic halides are provided in detail any labile halide could be used as the third catalyst component.

Concerning claim 15, a range of ratios for the various compounds in the catalyst are provided (column 3 lines 64-72).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRITESH PATEL whose telephone number is (571)270-7025. The examiner can normally be reached on Monday-Friday 7:30Am-5:00PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on (571)272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. P./

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/Nicholas D Lucchesi/

Supervisory Patent Examiner, Art Unit 3763